

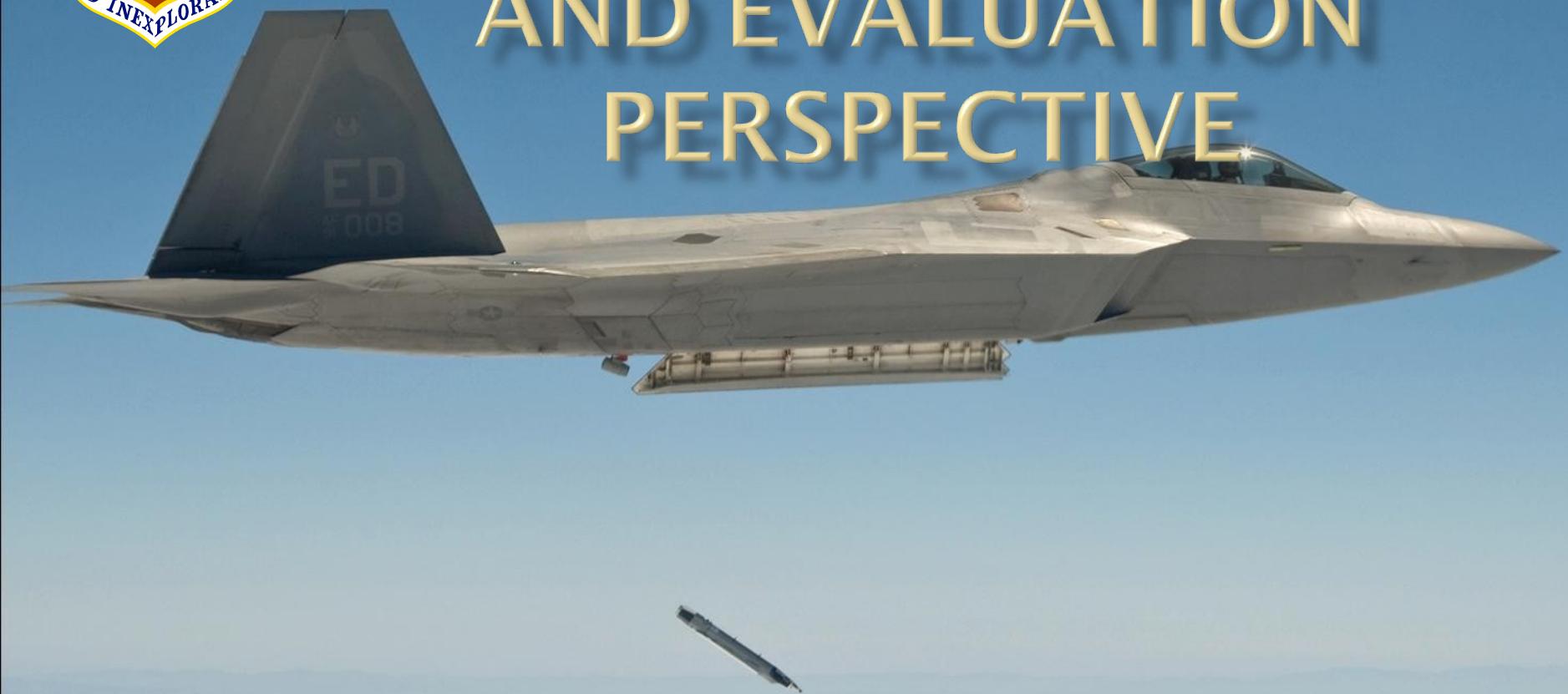


SECOND ANNUAL
DOD ACQUISITION INSIGHT DAYS
20-22 APRIL 2009 • DAYTON, OHIO





ACQUISITION FROM A TEST AND EVALUATION PERSPECTIVE



Maj Gen David J. Eichhorn
Commander, Air Force Flight Test
Center



DoD's High Risk Areas

GAO Report, 12 Mar 09

“Ultimately, the process produces more demand for new programs than available resources can support, promoting an unhealthy competition for funds that encourages programs to pursue overly ambitious capabilities, develop unrealistically low cost estimates and optimistic schedules, and suppress bad news.”

Houston, we have a problem.

AFMC's Test Enterprise is part of the solution.



USAF Chief of Staff Gen Norton Schwartz

“Acquisitions must be "fundamentally decided on the merits and getting needed capabilities to the field at a fair and reasonable price."

“We must exercise caution with systems that a particular vendor wishes to build or that satisfy a particular constituency.”

“Air Force is at an important pivot point- as it sees the current conflicts through to success, while preparing for challenges on and beyond the horizon.”



The Acquisitions Process - DT&E



Test & Evaluation
Force & Technology
Advanced Tactics &
Concepts



SAF/AQ

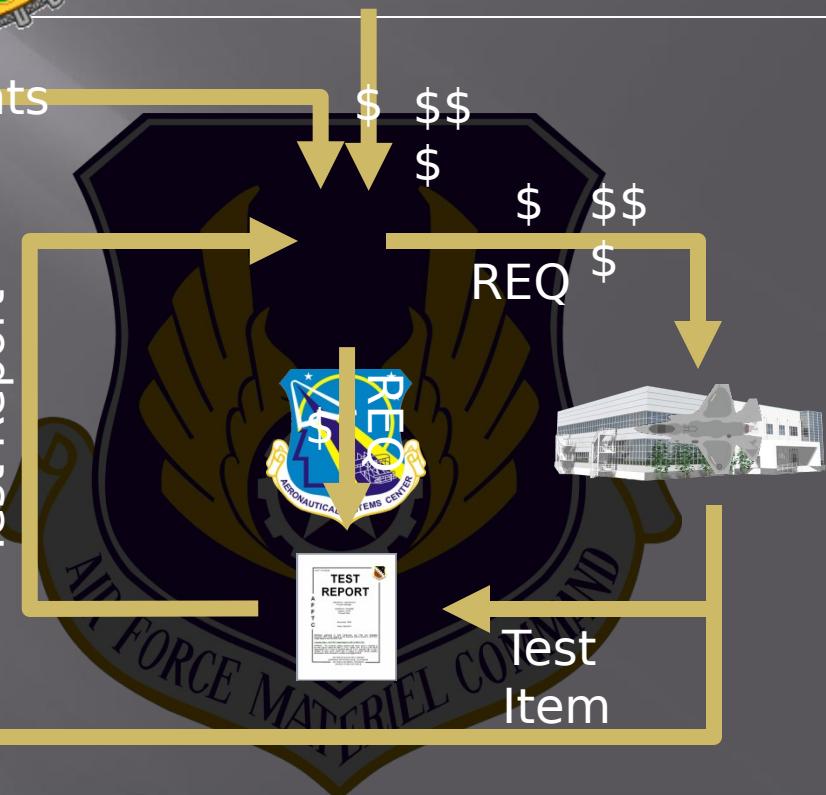


Requirements

Test Report

Production Item

Test Item





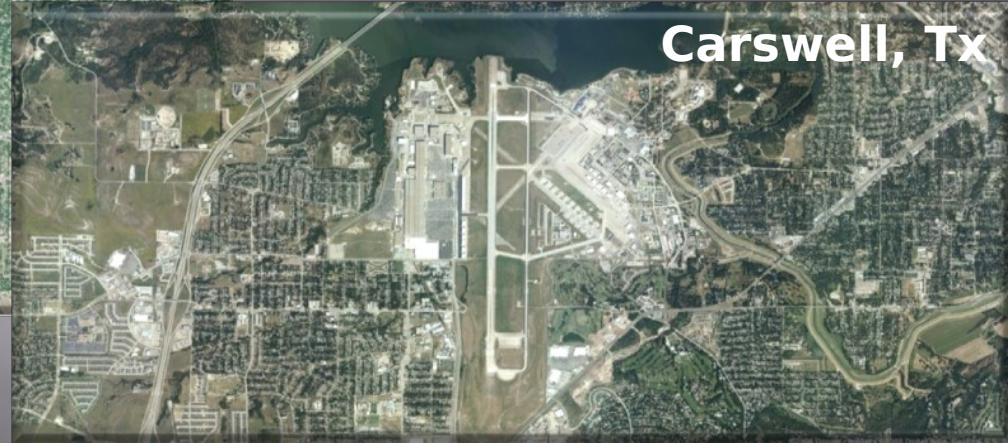
From “Toward the Unknown”

“Our sincere thanks to the United States Air Force for their help in the making of this motion picture. Airmen yet unborn will some day also add their thanks to today's pioneers of the skies.”

Not All Ranges Are Built Alike...



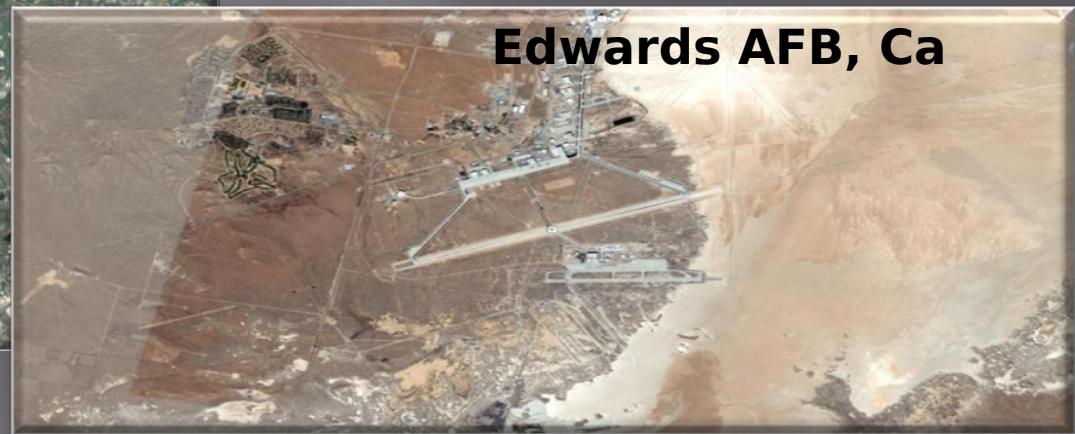
St Louis, Mo



Carswell, Tx



Marietta, Ga



Edwards AFB, Ca

**What Gets Tested - And Where It Gets Tested
Matters!**



The Art of the Possible

Early T&E Influence on Requirements

- **Government DT - Applied Science**
 - Achievable technology or unobtainium?
 - Cross-flow of solutions
- **How do you prove it?**
 - Between a humongous test program and off the shelf (take what you get) is goodness
 - Integration is never easy
 - Software has infinite ways to fail
- **Program Offices, Systems Groups, have to pull it all together and hold the line**
 - they need T&E's help



Ops to Acq to Ops

- Requirements come from Operators – by definition OT is there at conception
- Acquisition has to translate requirements into a buildable product
- DT ensures we get what we asked for
- OT ensures we asked for the right things
- And Operators get a system that works



Business Savvy Buyers

- In a free market, products are worth what people are willing to pay...see Economics 101 and the demand elasticity curve description
- Getting what we pay for and getting what we really need are truly two different things - only the marriage of government DT & OT right from the get go minimizes the time and cost of getting a usable product to the field



Industry or Government as the Technical Judge?

“You mock my pain!”

“Life is pain princess. Anyone who tells you differently is selling something!”

The Princess Bride

Roadblock/obstacle - TSPR

Trust **but verify** - Assess the design's health

Attitudes - e.g. We, the government, lack the expertise to take it back - **I disagree.**



Doing it Right

(The Problem is Cyclical)

The committee* is of the opinion that a highly technical Service such as the Air Force should prepare itself to take a more competent role than it is now taking in guarding the solution of the technical problems connected with its weapons and techniques.

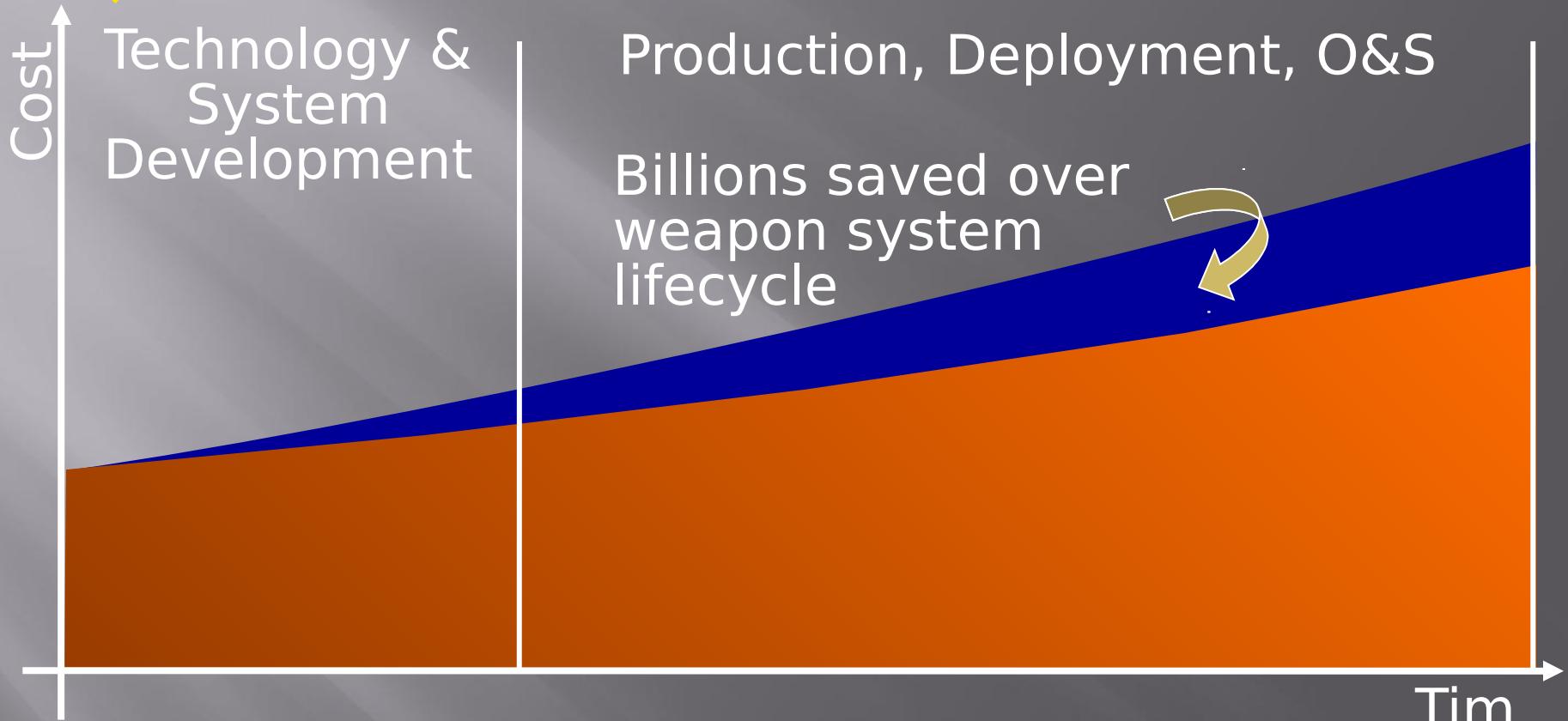
Only USAF-wide understanding of the serious nature of these problems and concerted action on the part of the entire organization can ever rescue Air Force R&D from the progressive deterioration it is now undergoing.

*1949 Scientific Advisory Board
(Dr von Karman, Gen Doolittle, Dr Wattendorf)





The Benefit of Doing it Right



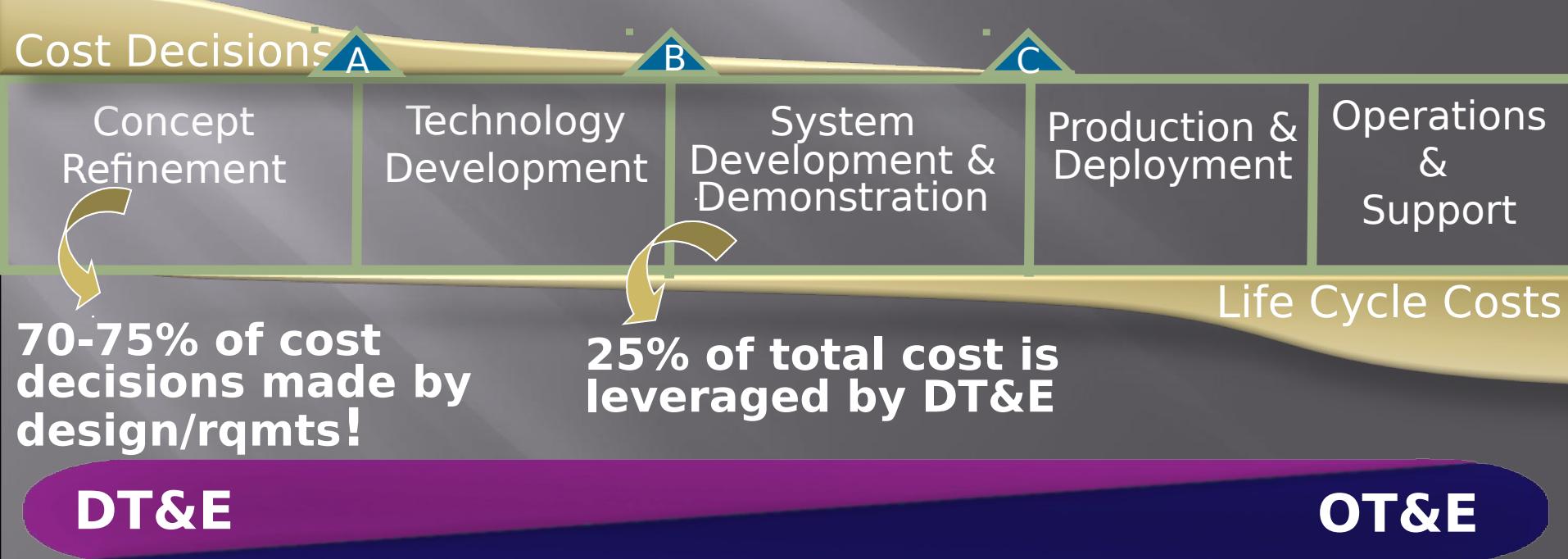
- Your Return on Investment: *30-to-1 Rule*
 - \$30 savings to weapon system programs for every \$1 invested in *established* T&E facilities



Need to Change Back

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*1949 Scientific Advisory Board (von Karman, Doolittle, Wattendorf)





Summary

- Early T&E Involvement
 - Establish the right rqmts early - savings are exponential
 - Effects of TSPR linger
 - Leverage industry but look after government interests
- Industry or Govt as technical judge?
 - Government buyer must be technical, self-reliant & competent
 - Need to take ownership of tech solution to strategic/tactical challenge
- Recommend a Design Health Assessment (DHA) prior to MS C (in concert with LHA)